

IN THE SPECIFICATION:

A substitute specification is enclosed. A marked up copy of this specification is also enclosed.

IN THE CLAIMS:

Please cancel claims 1-21 without prejudice and add the following claims:

B1
--22. A fluorescence correlation spectroscopy module
arrayed in an optical connection of a microscope comprising:

a support body;

a coupling connection disposed within said support body;

a pinhole array comprising one pinhole disposed within said support body; and

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a fiber optic array disposed within said support body for coupling in a stimulating light.

23. The module as in claim 22, wherein the optical connection of the microscope is an optical inlet.

24. The module as in claim 22, wherein the optical connection of the microscope is an optical outlet.

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cont.

25. The module according to claim 22, further comprising a collimator for generating a parallel light beam that is disposed within said support body in a beam path after said coupling connection.

26. The module as in claim 25, further comprising an adjustable lens array disposed within the beam path after said collimator for focusing the beam path confocally with said pinhole.

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27. The module as in claim 22, further comprising a filter array and a dichronic beam splitter both disposed within said beam path before a beam within said beam path is coupled into the microscope.

28. The module as in claim 27, further comprising a common receptacle holder removably inserted within said support body, wherein said filter array and said beam splitter are set on said common receptacle holder.

29. The module according to claim 22, further comprising at least one optical unit disposed within an emission beam path behind said pinhole.

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30. The module as in claim 29, wherein said at least one

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optical unit comprises a dichronic beam splitter.

31. The module as in claim 29, wherein said at least one optical unit comprises at least one mirror.

32. The module as in claim 29, further comprising at least one receptacle holder, wherein said at least one optical unit is removably insertable within said receptacle holder.

33. The module as in claim 32, further comprising a filter for selecting a detection wavelength, wherein said filter is disposed within said optical unit.

34. The module as in claim 22, further comprising a detector, and a lens array for focusing an emission light on said detector in the emission beam path before said detector.

35. The module as in claim 22, further comprising a receptacle holder disposed within said support body and wherein said receptacle holder comprises shaped surfaces, and complementary shaped surfaces arrayed and fixed in the beam path in said support body.

36. The module as in claim 22, wherein said support body is made in one piece from a metallic material and has a connection

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flange for attaching to support body to the connection of the microscope.

37. The module as in claim 22, further comprising a receptacle holder and wherein said support body has a series of cavities for receiving said receptacle holder, wherein said cavities have lateral surfaces to accommodate the reception of said receptacle holder.

38. The module as in claim 37, further comprising at least two frequency selective filter devices disposed within said filter devices.

39. The module as in claim 22, further comprising a collimator disposed within said housing and which is tuned to said natural aperture of said fiber optic waveguide.

40. The module as in claim 39, further comprising frequency selective devices which choose different spectrum ranges of said emission wavelengths.

41. The module as in claim 22, wherein the microscope contains a fluorescence correlation spectroscopy module.
